YAMAHA

INPUT RACK

Ri8-D

OUTPUT RACK

Ro8-D

Owner's Manual

Bedienungsanleitung

Mode d'emploi

Manual de instrucciones

Manual do Proprietário

Manuale di istruzioni

Руководство пользователя

使用说明书

取扱説明書

English

Deutsch

Français

Español

Português

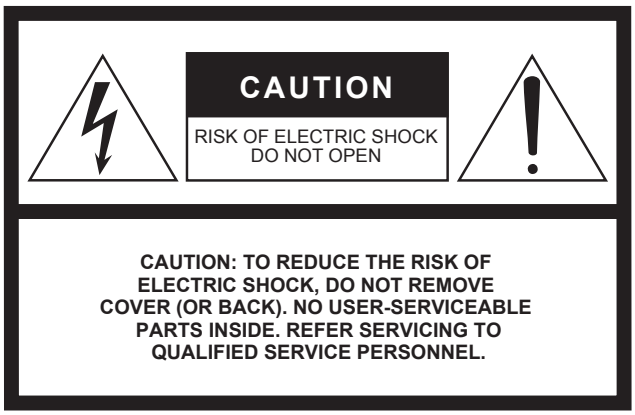
Italiano

Русский

中文

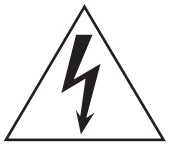
日本語

EN
DE
FR
ES
PT
IT
RU
ZH
JA


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF
ELECTRIC SHOCK, DO NOT REMOVE
COVER (OR BACK). NO USER-SERVICEABLE
PARTS INSIDE. REFER SERVICING TO
QUALIFIED SERVICE PERSONNEL.

The above warning is located on the top of the unit.

Explanation of Graphical Symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

IMPORTANT SAFETY INSTRUCTIONS

1 **Read these instructions.**
2 **Keep these instructions.**
3 **Heed all warnings.**
4 **Follow all instructions.**
5 **Do not use this apparatus near water.**
6 **Clean only with dry cloth.**
7 **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.**
8 **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9 **Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.**
10 **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.**
11 **Only use attachments/accessories specified by the manufacturer.**
12 **Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.**

13 **Unplug this apparatus during lightning storms or when unused for long periods of time.**
14 **Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.**

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

(UL60065_03)

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

(class b korea)

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

   Relocate either this product or the device that is being affected by the interference.

   Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

   In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

   If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

   The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA. (class B)

COMPLIANCE INFORMATION STATEMENT (DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party : Yamaha Corporation of America
Address : 6600 Orangethorpe Ave., Buena Park, Calif. 90620
Telephone : 714-522-9011
Type of Equipment : I/O RACK
Model Name : Ri8-D/Ro8-D

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
1) this device may not cause harmful interference, and
2) this device must accept any interference received including interference that may cause undesired operation.
See user manual instructions if interference to radio reception is suspected.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA. (FCC DoC)

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

WARNING: THIS APPARATUS MUST BE EARTHED IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW	:	EARTH
BLUE	:	NEUTRAL
BROWN	:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or colored GREEN or GREEN-and-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

(3 wires)

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Accessories

(Please check the package contents.)

- Owner's Manual
- AC power cable

English

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.

⚠ WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Power supply/Power cord

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- Only use the voltage specified as correct for the device. The required voltage is printed on the name plate of the device.
- Use only the supplied power cord/plug.
  If you intend to use the device in an area other than in the one you purchased, the included power cord may not be compatible. Please check with your Yamaha dealer.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Be sure to connect to an appropriate outlet with a protective grounding connection. Improper grounding can result in electrical shock.

Do not open

- This device contains no user-serviceable parts. Do not open the device or attempt to disassemble the internal parts or modify them in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the device to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the device, turn off the power immediately and unplug the power cord from the AC outlet. Then have the device inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit. A burning item may fall over and cause a fire.

If you notice any abnormality

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. Then have the device inspected by Yamaha service personnel.
  - The power cord or plug becomes frayed or damaged.
  - It emits unusual smells or smoke.
  - Some object has been dropped into the instrument.
  - There is a sudden loss of sound during use of the device.
- If this device should be dropped or damaged, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the device inspected by qualified Yamaha service personnel.

⚠ CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the device or other property. These precautions include, but are not limited to, the following:

Power supply/Power cord

- When removing the electric plug from the device or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the device is not to be used for extended periods of time, or during electrical storms.

Location

- Do not place the device in an unstable position where it might accidentally fall over.
- Do not block the vents. This device has ventilation holes at the front and side to prevent the internal temperature from becoming too high. In particular, do not place the device on its side or upside down. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), or even fire.
- To avoid damage, do not install or store the device in a place subject to salty air or corrosive gas or chemicals.
- Before moving the device, remove all connected cables.
- When setting up the device, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.
- If the device is mounted in an EIA standard rack, carefully read the section “Precautions for Rack Mounting” on page 8. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), malfunction, or even fire.
- Keep device away from the reach of children.

Connections

- Before connecting the device to other devices, turn off the power for all devices. Before turning the power on or off for all devices, set all volume levels to minimum.

Maintenance

- Remove the power plug from the AC outlet when cleaning the device.

Handling caution

- Do not insert your fingers or hands in any gaps or openings on the device (vents, etc.).
- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into any gaps or openings on the device (vents, etc.) If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then have the device inspected by qualified Yamaha service personnel.
- Do not rest your weight on the device or place heavy objects on it, and avoid use excessive force on the buttons, switches or connectors.
- Do not use speakers for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the device, or data that is lost or destroyed.

NOTICE

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

Handling and Maintenance

- Do not use the device in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the device, TV, or radio may generate noise.
- Do not expose the device to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration, damage to the internal components or unstable operation.
- Do not place vinyl, plastic or rubber objects on the device, since this might discolor the panel or keyboard.
- When cleaning the device, use a dry and soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.
- Condensation can occur in the device due to rapid, drastic changes in ambient temperature—when the device is moved from one location to another, or air conditioning is turned on or off, for example. Using the device while condensation is present can cause damage. If there is reason to believe that condensation might have occurred, leave the device for several hours without turning on the power until the condensation has completely dried out.
- Always turn the power off when the device is not in use.

Connectors

- XLR-type connectors are wired as follows (IEC60268 standard): pin 1: ground, pin 2: hot (+), and pin 3: cold (-).

Information

About copyrights

* Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.

About this manual

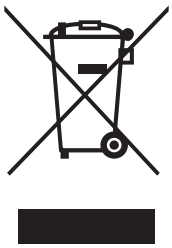
* The illustrations and LCD screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your device.

* The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

* Specifications and exterior appearance may be subject to change without prior notice as a result of improvements.

European Models
Inrush Current based on EN 55103-1:2009
2A (on initial switch-on)
2A (after a supply interruption of 5s)
Conforms to Environments: E1, E2, E3 and E4

Information for Users on Collection and Disposal of Old Equipment



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC.

By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

[For business users in the European Union]

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]

This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

(weee_eu)

English

Introduction

Thank you for choosing the Yamaha Input Rack Ri8-D/Output Rack Ro8-D.

The Ri8-D is a Dante-compatible input rack equipped with 8 channels analog input. The Ro8-D is a Dante-compatible output rack equipped with 8 channels analog output.

To take full advantage of the superior functions and performance offered by the Ri8-D/Ro8-D, and to extend the useful life of the product, be sure to read this owner's manual carefully before operation.

Features

Long-distance Dante Network Capability

Low-latency, low-jitter audio can be transferred over distances up to 100 meters* between devices via standard Ethernet cables using the Dante network protocol. The Ri8-D/Ro8-D can be used as a general-purpose I/O box for the Dante network. Supported sampling rates are 44.1 kHz, 48 kHz, 88.2 kHz, and 96 kHz.

* Maximum practical distance may vary according to the cable used.

Vast variety of layout is available with compact 1U chassis

The Ri8-D is dedicated for input rack and the Ro8-D is for output. This enables an installation of rack for an occasion requires input only or output only.

Of course, combination with the Rio3224-D/Rio1608-D (input/output rack) is enabled to realize system configuration with higher flexibility.

Remotely Controllable Internal Head Amplifiers (Ri8-D only)

Internal head amplifier parameters can be remotely controlled from a compatible device.

Gain Compensation Function (Ri8-D only)

Enabling Gain Compensation feature of the Ri8-D for supporting equipment with gain compensation capability such as CL Series products may compensate change of analog gain in downstream by the compensation gain integrated in the Ri8-D, and it will send the audio signal to Dante network with gain level fixed to a value immediately before it was enabled.

Direct Audio In/Out With a Connected Computer

Connecting the Ri8-D/Ro8-D with a standard Ethernet cable to a computer that has a Dante Virtual Soundcard installed enables you to directly input or output audio signals without using an audio interface device (the Ri8-D is for input and the Ro8-D is for output only).

Firmware Updates

This product enables you to update the unit firmware to improve operations, add functions, and correct possible malfunctions. The following two types of firmware are available for the unit.

- Unit's firmware
- Dante module firmware

You must update each type of firmware separately.

Details on updating the firmware are available on the following website:

http://www.yamahaproaudio.com/

For information on updating and setting up the unit, please refer to the firmware update guide available on the website.

NOTE

When you update Dante firmware on the unit, be sure to update Dante firmware on other Dante-compatible devices connected to the Ri8-D/Ro8-D.

Precautions for Rack Mounting

This unit is rated for operation at ambient temperatures ranging from 0 to 40 degrees Celsius. When mounting the unit with other Ri8-D/Ro8-D unit(s) or other device(s) in an EIA standard equipment rack, internal temperatures can exceed the specified upper limit, resulting in impaired performance or failure. When rack mounting the unit, always observe the following requirements to avoid heat buildup:

- When mounting the unit in a rack with devices such as power amplifiers that generate a significant amount of heat, leave more than 1U of space between the Ri8-D/Ro8-D and other equipment. Also either leave the open spaces uncovered or install appropriate ventilating panels to minimize the possibility of heat buildup.
- To ensure sufficient airflow, leave the rear of the rack open and position it at least 10 centimeters from walls or other surfaces. If the rear of the rack can't be left open, install a commercially available fan or similar ventilating option to secure sufficient airflow. If you've installed a fan kit, there may be cases in which closing the rear of the rack will produce a greater cooling effect. Refer to the rack and/or fan unit manual for details.

About Dante

This product features Dante technology as a protocol to transmit audio signals. Dante is a network protocol developed by Audinate. It is designed to deliver multi-channel audio signals at various sampling and bit rates, as well as device control signals over a Giga-bit Ethernet (GbE) network. Dante also offers the following benefits:

- It transmits up to 512 in/512 out, for a total 1024 channels (in theory) of audio over a GbE network. (The Ri8-D features 8 in with a 24/32-bit resolution. The Ro8-D features 8 out with a 24/32-bit resolution.)
- Dante-enabled devices will automatically configure their network interfaces and find each other on the network. You can label Dante devices and their audio channels with names that make sense to you.
- Dante uses high accuracy network synchronization standards to achieve sample-accurate playback with extremely low latency and jitter. Four types of latency are available on the Ri8-D/Ro8-D: 0.25 msec, 0.5 msec, 1.0 msec, and 5.0 msec.
- Dante supports redundant connections via primary and secondary networks to defend against unforeseen difficulties.
- Connecting a computer to Dante network over Ethernet enables you to directly input or output audio signals without using any audio interface devices.

By taking advantages of these benefits, you can skip any complicated procedures to automate connections and setups of Dante-enabled devices, remotely control I/O racks or amplifiers from a mixing console, or make multi-track recordings to a DAW, such as Nuendo, installed on a computer in the network.

Visit Audinate website for more details on Dante.

http://www.audinate.com/

More information on Dante is also posted on the Yamaha Pro Audio website:

http://www.yamahaproaudio.com/

NOTE

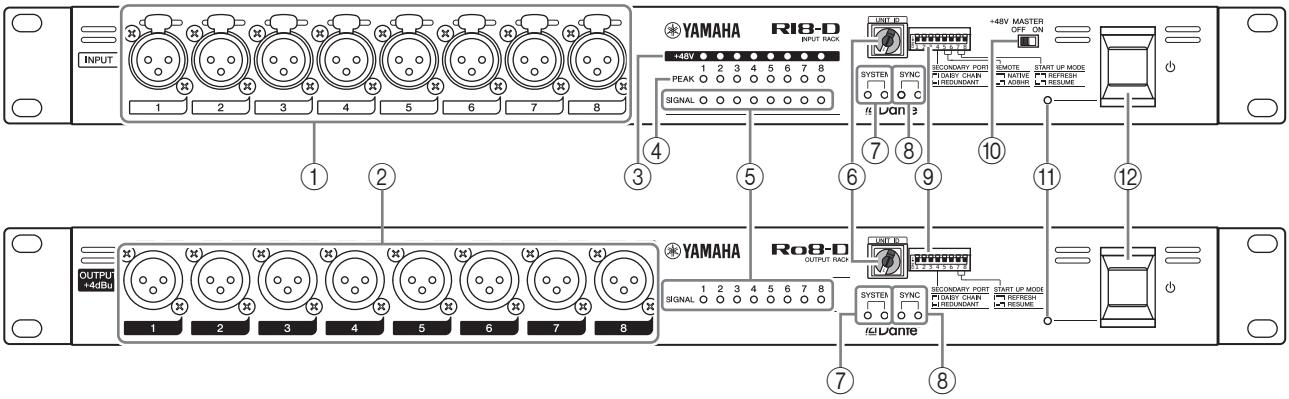
Please do not use the EEE function (*) of network switches in a Dante network.
Although power management should be negotiated automatically in switches that support EEE, some switches do not perform the negotiation properly. This may cause EEE to be enabled in Dante networks when it is not appropriate, resulting in poor synchronization performance and occasional dropouts.
Therefore we strongly recommend that:

- If you use managed switches, ensure that they allow EEE to be disabled. Make sure that EEE is disabled on all ports used for real-time Dante traffic.
- If you use unmanaged switches, make sure to not use network switches that support the EEE function, since EEE operation cannot be disabled in these switches.

* EEE (Energy Efficient Ethernet) is a technology that reduces switch power consumption during periods of low network traffic. It is also known as Green Ethernet and IEEE802.3az.

Controls and Functions

Front Panel



① [INPUT] Connectors 1–8 (Ri8-D only)

These are the XLR-3-31 type analog balanced connectors for the input channels. The input level range is from –62 dBu to +10 dBu. +48V phantom power can be supplied to devices that require it via the input connectors.

NOTE

The PAD will be switched on or off internally when the gain of the internal head amp is adjusted between +17 dB and +18 dB. Keep in mind that noise may be generated if there is a difference between the Hot and Cold impedance of the external device connected to the INPUT connector when using phantom power.

② OUTPUT +4 dBu Connectors 1–8 (Ro8-D only)

These XLR-3-32 type balanced connectors deliver analog output from the unit's corresponding output channels. Nominal output level is +4 dBu.

③ [+48V] Indicators (Ri8-D only)

These indicators light when +48V phantom power is turned ON for the corresponding input channels. Phantom power supply switching can be carried out from a compatible digital mixing console or computer application. No phantom power will be supplied, however, if the [+48V MASTER] switch is OFF, even if phantom power to individual channels is turned ON (the +48V indicators will still light). The +48V indicators also function as error indicators: the indicators for all channels will flash if an error occurs.

CAUTION:

- Make sure that phantom power is turned OFF unless it is needed.
- When turning phantom power ON, make sure that no equipment other than phantom-powered devices such as condenser microphones are connected to the corresponding [INPUT] connectors. Applying phantom power to a device that does not require phantom power can damage the connected device.
- Do not connect or disconnect a device to an INPUT while phantom power is applied. Doing so can damage the connected device and/or the unit itself.
- To prevent possible damage to speakers, make sure that power amplifiers and/or powered speakers are turned OFF when switching phantom power ON or OFF. We also recommend setting all digital mixing console output controls to minimum when turning phantom power ON or OFF. Sudden high level peaks caused by the switching operation can damage equipment as well as the hearing of those present.

④ [PEAK] Indicators (Ri8-D only)

These indicators light red when the signal level of the corresponding channel reaches or exceeds –3 dBFS.

The PEAK indicators also function as error indicators: the indicators for all channels will flash if an error occurs.

⑤ [SIG] (Signal) Indicators

These indicators light green when the signal applied to the corresponding channel reaches or exceeds –34 dBFS.

The SIG indicators also function as error indicators: the indicators for all channels will flash if an error occurs.

⑥ [UNIT ID] Rotary Switch

This rotary switch enables you to set an ID number so that connected devices will recognize the Ri8-D/Ro8-D. The UNIT ID must be a unique number in the network so that the Ri8-D/Ro8-D will be able to transmit and receive audio signals over a Dante network, or be controlled from a connected digital mixing console.

Use the rotary switch while the power to the unit is turned OFF. Otherwise, the ID setting will not be effective.

⑦ [SYSTEM] Indicators

These indicators show the Ri8-D/Ro8-D's operating status. If the green indicator lights steadily and the red indicator turns off, the unit is operating normally.

When power to the unit is turned ON, if the green indicator turns off, or if the red indicator lights or flashes, the unit is not functioning properly. In this case, refer to the "Messages" section (see page 18).

⑧ [SYNC] Indicators

These indicators show the operating status of the Ri8-D/Ro8-D's internal Dante network capability.

If the green indicator lights, the unit is operating as a word clock slave and synching to the word clock.

If the green indicator flashes, the unit is operating as the word clock master.

If the power to the unit is turned on but the green indicator is turned off, the unit is not functioning properly. In this case, refer to the "Messages" section (see page 18).

If the orange indicator lights or flashes, refer to the "Messages" section.

⑨ DIP Switches

These switches enable you to specify the settings related to the startup operation of the unit.

Set the DIP switches while the power to the unit is turned OFF. Otherwise, the setting will not be effective.

Refer to the following for details.

Switch	Status
	Represent a status with switch toggled up.
	Represent a status with switch toggled down.

- **Switch 1 (UNIT ID)**

This switch setting determines whether the hexadecimal setting of the [UNIT ID] rotary switch will range from 0 to F (0 to 15) or from 10 to 1F (16 to 31).

Switch	Setting	Description
	UNIT ID ranging from 0 to F	The setting range of the [UNIT ID] rotary switch is from 0 to F.
	UNIT ID ranging from 10 to 1F	The setting range of the [UNIT ID] rotary switch is from 10 to 1F.

- **Switch 4 (SECONDARY PORT)**

This switch setting determines whether the rear-panel [SECONDARY] connector will be used for a daisy chain or redundant network.

With the [DAISY CHAIN] setting, you can connect multiple Dante-enabled network devices in a daisy chain without using a network switch. Refer to "Daisy Chain Network" in the "About Connections" section (see page 14) for more information about daisy chain connections.

With the [REDUNDANT] setting, the [PRIMARY] connector will be used for primary connections, and the [SECONDARY] connector will be used for secondary (backup) connections. If the unit is unable to transmit signals through the [PRIMARY] connector for some reason (e.g., due to damage or accidental removal of the cable, or a failed network switch), the [SECONDARY] connector will automatically take over communications and functions on the redundant network. Refer to "About Redundant Networks" in the "About Connections" section (see page 14) for more information on redundant networks.

Switch	Setting	Description
	DAISY CHAIN	The [SECONDARY] connector is used for a daisy chain connection. It can be connected in a daisy chain by connecting to [PRIMARY] connector of the next device.
	REDUNDANT	The [SECONDARY] connector is used for a redundant network. It will function as backup connection, independent of the network to which the [PRIMARY] connector is connected.

- **Switches 5 and 6 (REMOTE) (Ri8-D only)**

When you plan to monitor or control the Ri8-D from a digital mixing console, these switches determine whether to use an Ri8-D-native compatible device such as CL Series or a non-Ri8-D-native device such as M7CL Series. Information on which devices feature Ri8-D-native support is available at the Yamaha pro audio website product page:

http://www.yamahaproaudio.com/products/

Switch	Setting	Description
	NATIVE	An Ri8-D-native device will control the Ri8-D.
	AD8HR	A non-Ri8-D-native device will control the Ri8-D as AD8HRs. Set the UNIT ID number between 1 and F. The unit with any other UNIT ID numbers will not be controllable.

- **Switches 7 and 8 (START UP MODE)**
  These switches determine whether part of the internal memory is initialized when the unit starts up, or uses the previous settings (i.e., settings used prior to the most recent power-off).
  If you plan to connect an Ri8-D/Ro8-D-native device, such as a CL series product, set the switches to [REFRESH]. The Ri8-D/Ro8-D will not input or output audio until the connected Ri8-D/Ro8-D-native device transmits its settings to the Ri8-D/Ro8-D, so that the Ri8-D/Ro8-D will not output audio accidentally.

Switch	Setting	Description
	REFRESH	The Ri8-D/Ro8-D starts up with part of the internal memory initialized. The following settings are initialized. HA GAIN: –6 dB +48V: OFF HPF: OFF HPF Freq: 80Hz Gain Compensation: OFF Dante Patch: OFF
	RESUME	The unit starts up using the settings assigned prior to the most recent power-off.

⑩ [+48V MASTER] Switch (Ri8-D only)

This is the master switch for the unit's +48V phantom power supply.

If the [+48V MASTER] switch is off, no phantom power will be supplied to the unit's input connectors even if the individual input phantom power settings are ON. However, the [+48V] indicators will light on channels for which phantom power is turned ON even if the [+48V MASTER] switch is OFF.

⑪ Power Indicator

Lights when AC power to the unit is ON.

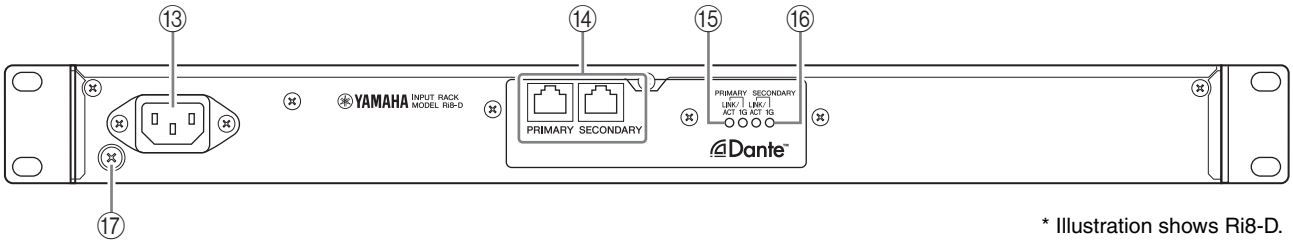
⑫ Power Switch (⏻)

Turns power to the unit ON or OFF.

CAUTIONS:

- Rapidly turning the unit on and off in succession can cause it to malfunction. After turning the unit off, wait for about 6 seconds before turning it on again.
- Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.

Rear Panel



* Illustration shows Ri8-D.

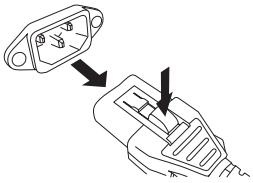
⑬ AC IN Connector

Connect the supplied AC power cord here. First, connect the power cord to the device, then insert the power cord plug into the AC outlet.

The supplied power cord features a special latching mechanism (V-LOCK) to prevent the power cord from being accidentally disconnected. Connect the power cord by inserting the power cord fully until it is locked.

CAUTION:

Be sure to turn the power off before connecting or disconnecting the power cord. Press the latch button on the plug to disconnect the power cord.



⑭ [PRIMARY]/[SECONDARY] Connectors

The Ri8-D/Ro8-D can be connected to other Dante-compatible devices (such as a CL-series product) via these RJ45 connectors using standard Ethernet cables (CAT5e or better recommended).

If DIP switch 4 on the front panel is set upward (to DAISY CHAIN), audio signals coming into one of these connectors will be output from the other. Refer to "Daisy Chain Network" in the "About Connections" section (see page 14) for more information on daisy chain connections.

If DIP switch 4 on the front panel is set downward (to REDUNDANT), the [PRIMARY] connector will be used for primary connection, and the [SECONDARY] connector will be used for secondary (backup) connection. If the unit is unable to transmit signals through the [PRIMARY] connector for some reason (e.g., due to damage or accidental removal of the cable, or a failed network switch), the [SECONDARY] connector will automatically take over the connection. Refer to "About Redundant Networks" in the "About Connections" section (see page 14) for more information on redundant networks.

NOTE

- Use STP (shielded twisted pair) cable to prevent electromagnetic interference. Make sure that the metal parts of the plugs are electrically connected to the STP cable shield by conductive tape or comparable means.
- Connect only Dante-compatible devices or GbE-compatible devices (including a computer).

⑮ [LINK/ACT] Indicators

These indicators show the communication status of the [PRIMARY] and [SECONDARY] connectors.

They flash fast if the Ethernet cables are connected properly.

⑯ [1G] Indicators

These indicators light when the Dante network is functioning as Giga-bit Ethernet.

⑰ Grounding screw

Grounding of chassis shall be sufficiently connected via a power supply cord as long as AC socket is grounded since the attached power supply cord is a triplex cable.In addition, connecting this screw to ground may prevent hum noise or interference noise.

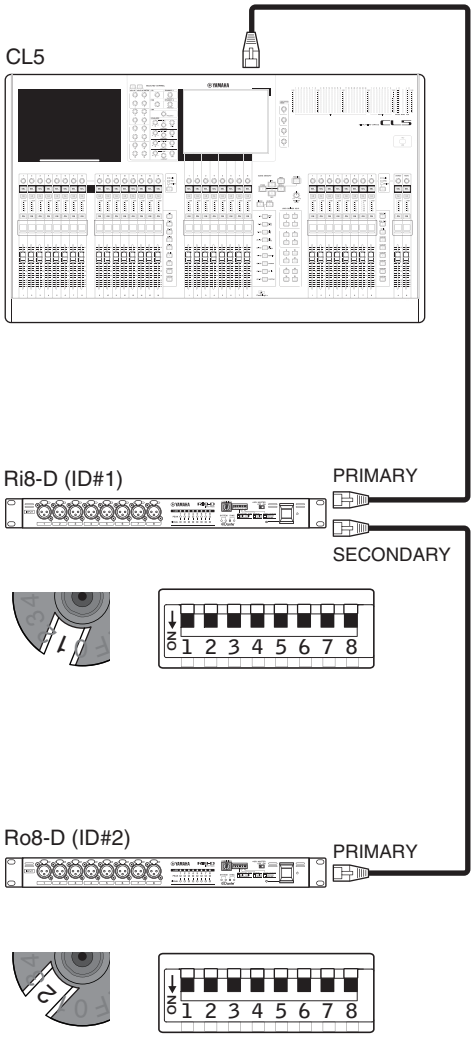
About Connections

There are two ways to connect the Ri8-D/Ro8-D to a Dante network.

Daisy Chain Network

A daisy chain is a wiring scheme in which multiple devices are connected together in sequence. In this way, networking is simple and requires no network switches. This connection method is suitable for a simple system with a small number of devices.

However, if a large number of devices are connected, the latency value must be increased. Also, if a connection is broken in a daisy chain network, the signal flow is interrupted at that point and no signal will be transferred beyond that point.



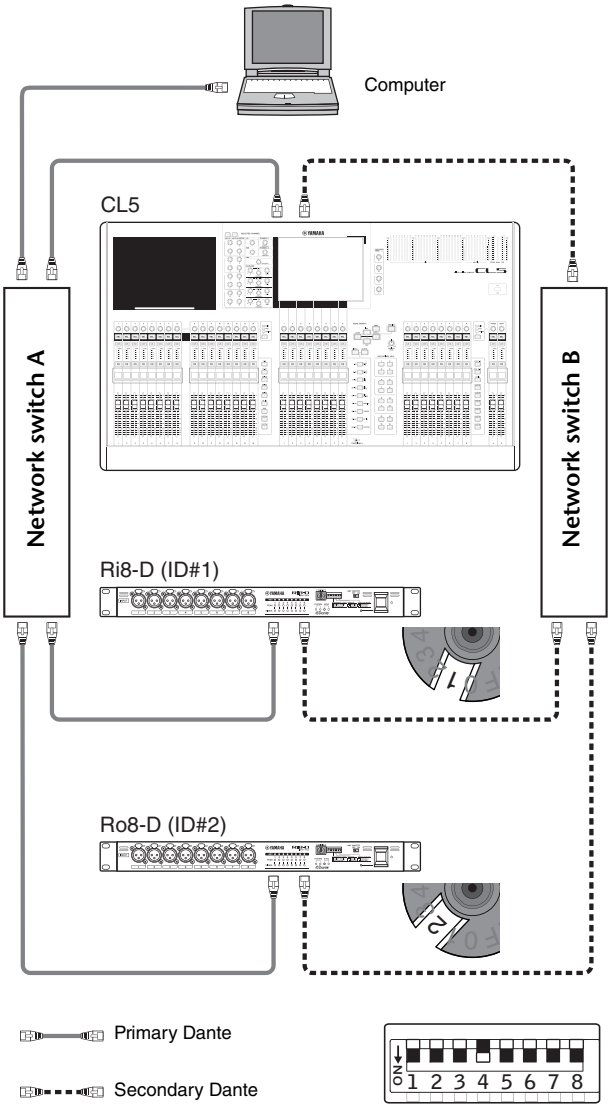
Star Network

In a star network, each device is connected to a central network switch. Using a GbE-compatible network switch enables you to configure a wide-band, large-scale network. We recommend a network switch that features various functions to control and monitor the network (such as Qos, the ability to assign priority to data flows - e.g., clock synchronization or audio transmission on certain data circuits.)

With this topology, it is common to configure a redundant network so that an unexpected network problem will not affect any audio or otherwise stable communications.

About Redundant Networks

A redundant network consists of two circuits, a primary circuit and a secondary circuit. Normally, the network operates on the primary circuit. However, if the primary connection is broken, the secondary circuit will automatically take over communications. Therefore, using a redundant network with a star topology would increase communication stability relative to a daisy chain network.



About Dante Controller

Dante Controller is a software application that allows configuration and audio routing of Dante networks. Use this application if you plan to connect or set up Dante-enabled devices that do not feature Ri8-D/Ro8-D-native support. Please download the latest Dante Controller from the following website.

Please note that Dante Controller Version 3.2.1 or later supports Ri8-D/Ro8-D.

http://www.yamahaproaudio.com/

To run Dante Controller, a computer must feature a GbE-compatible Ethernet connector.

Refer to the Dante Controller owner's manual for details on Dante Controller.

In Dante Controller, make the following basic settings:

- [Network View] → [Routing] → I/O patching
- [Network View] → [Clock Status] → Word clock master setting
- [Device View] → [Config] → Sampling rate setting

Head Amp Control

The Ri8-D head amplifiers can be remotely controlled from a host device, such as a compatible Yamaha digital mixing console.

Control from an Ri8-D-native Device

The Ri8-D head amplifiers can be controlled remotely from an Ri8-D-native digital mixing console, such as a CL series product.

The connected Ri8-D-native device displays the model name and UNIT ID number of the corresponding Ri8-D unit to be controlled.

If you plan to connect a device that features Ri8-D-native support to monitor and control the head amplifiers, refer to the owner's manual for the corresponding device.

Control from a Device That Does Not Feature Ri8-D-Native Support

This section explains how to configure the Ri8-D settings that are required to control the Ri8-D as AD8HR units from a device that does not feature Ri8-D-native support.

NOTE

The following Yamaha non-Ri8-D-native devices enable you to control the Ri8-D as AD8HRs. Insert the Dante-MY16-AUD card which is a firmware controllable as AD8HR into the Mini-YGDAI slot for connection.

M7CL, LS9, DM1000, DM2000, PM5D/DSP5D, DME64N/24N

Setting the DIP Switches

While the power to the unit is off, flip DIP switch 5 down and DIP switch 6 up.

Setting the UNIT ID

Setting the Ri8-D in [AD8HR] will set UNIT ID as virtual ID (as AD8HR Device ID).

If you combine Rio3224-D or Rio1608-D or add an AD8HR or SB168-ES in the network, make sure that the IDs are all unique.

Set the Ri8-D correctly so that you can control it as AD8HRs. In addition, scene recall can be used to recall all head amplifier settings at once. Refer to the digital mixing console owner's manual for details on head amplifier control.

Head Amplifier Parameters That Can be Monitored and Controlled

Parameter	Description
+48V	Turns +48V phantom power ON or OFF for each channel.
HA GAIN	Adjusts gain from –6 dB to 66 dB in 1-dB increments.
HPF	Turns the high-pass filter ON or OFF.
HPF FREQ	Adjusts the cutoff frequency of the high-pass filter (12 dB/Oct.) from 20 Hz to 600 Hz in 60 steps.
METER (Ri8-D-native device only)	Displays a level meter for each input channel.
Device ID	It displays Device ID 1–F (Device ID as AD8HR) assigned based on the UNIT ID.
+48V Master SW	Displays the [+48V MASTER] switch ON/OFF status of the +48V phantom power supply.
Gain Compensation (Ri8-D-native device only)	Turns the Gain Compensation ON or OFF.

Troubleshooting

Troubleshooting

Symptom	Cause	Possible Solution
The power won't turn on. The power indicator doesn't light.	The power cable is connected improperly.	Connect the power cable properly (see page 13).
	The [POWER] switch is not turned ON.	Turn the [POWER] switch ON. If the power still will not come on, refer the problem to your Yamaha dealer.
The unit is not receiving an input signal.	The input cables are not connected properly.	Connect the cables properly.
	No signal is output from external devices.	Output a signal from the source device and make sure that the SIG indicators on the appropriate channels will light.
	The internal head amplifier gain is not set to an appropriate level.	Set the internal head amplifier gain to an appropriate level.
	The DIP switches are set to REFRESH, but the Ri8-D-native device has not started up.	Start the Ri8-D-native device to send the setting to the Ri8-D.
The input level is too low.	A condenser microphone is connected.	Turn the [+48V MASTER] switch ON.
		Turn phantom power for the corresponding channel(s) ON from the Ri8-D-native device.
	The internal head amplifier gain is not set to an appropriate level.	Set the internal head amplifier gain to an appropriate level.
No sound is heard.	The cables are not connected properly.	Connect the cables properly.
	The DIP switches are set to REFRESH, but the Ro8-D-native device has not started up.	Start the Ro8-D-native device to send the setting to the Ro8-D.
	Output is muted.	Unmute the output on the Ro8-D-native device.
The head amp cannot be controlled.	The Ri8-D has not been mounted on the RACK of the Ri8-D-native device.	Mount the Ri8-D on the RACK of the Ri8-D-native device.
Adjusting the internal head amp gain does not change the audio level.	The Gain Compensation function is turned on.	If you are not using the Gain Compensation function, turn it off.
Adjustment of the [UNIT ID] rotary switch or DIP switch settings seems to be ineffective.	You may have adjusted the setting while the power is ON.	Turn the power OFF, then change the setting.

Messages

Errors, warnings, and certain other types of information are displayed via the Ri8-D/Ro8-D front panel indicators. Messages are also displayed in the Dante Controller Error Status field.

Each indicator lights or flashes as described below:

No call-out	The indicator is off.
Light	The indicator remains lit steadily.
Flash	The indicator continues to flash.
Flash x2	The indicator flashes twice cyclically.
Flash x3	The indicator flashes three times cyclically.

Error Messages

When an error occurs, the indicators for all channels will flash until the error is resolved, and the SYSTEM indicators will light and/or flash cyclically as shown in the chart below. In that case, repair is required. Contact your Yamaha dealer.

SYSTEM Indicators	Description	Possible Solution
SYSTEM Flash x2	An internal error has occurred.	The device has failed. Contact your Yamaha dealer for repair.
SYSTEM Flash x3	The MAC address setting has been corrupted and no communication can occur via Dante.	
SYSTEM Light Flash x3	The internal memory has been corrupted.	Use the front-panel DIP switches to set START UP MODE to REFRESH, then restart the unit. If the problem persists after setting START UP MODE back to RESUME, consult your Yamaha dealer.
SYSTEM Light	UNIT ID is not unique.	Set a unique UNIT ID number for the Dante network.
SYSTEM Flash	The DIP switches are not set correctly.	Check the DIP switch settings, and set them correctly.

Warning Messages

The indicators will light and/or flash as shown until the cause is resolved.

If the green [SYNC] indicator is unlit, the unit's clock is unconfirmed.

SYNC Indicators	Description	Possible Solution
SYNC Flash	The word clock is not set correctly.	Set the clock master and sampling frequency correctly on the Ri8-D/ Ro8-D-native device or in Dante Controller.
SYNC Flash x2	Dante Network circuit is broken.	Make sure that the Ethernet cables are not removed or short-circuited.
SYNC Flash x3	Other Dante-compatible devices cannot be found due to an incorrectly-wired Dante Network.	Make sure that the Ethernet cables are connected correctly.

If the green indicator is flashing, the unit is the clock master.

If the green indicator is lit, the unit is the clock slave and the clock is synchronized.

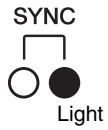
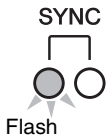
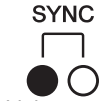
SYNC Indicators	Description	Possible Solution
SYNC Light Light or flash	A non-GbE-compatible device is connected.	When transferring audio via Dante, use device that supports GbE.
SYNC Light Flash or flash	The SECONDARY connector has taken over communications during redundant network operation.	Check the circuit connected to the PRIMARY connector.
SYNC Light Flash x2 or flash	An abnormality has occurred on the circuit connected to the SECONDARY connector during redundant network operation.	Check the circuit connected to the SECONDARY connector.

Information Messages

The status is shown by the lit/flashing state of the indicator.

If the orange [SYNC] indicator is unlit, the unit is operating normally.

If the green [SYNC] indicator is unlit, the unit's clock is unconfirmed.

SYNC Indicators	Description	Explanation
	Synchronization is occurring.	Please wait until the unit synchronizes completely. It may take up to 45 seconds to synchronize completely.
	The unit is functioning correctly as the word clock master.	The unit is operating as the word clock master.
	The unit is functioning correctly as the word clock slave.	The unit is operating as the clock slave and the clock is synchronized.

MEMO

Specifications

General Specifications

Sampling Frequency	External	44.1kHz +4.1667%, +0.1%, –0.1%, –4.0%	±200ppm
		48kHz +4.1667%, +0.1%, –0.1%, –4.0%	±200ppm
		88.2kHz +4.1667%, +0.1%, –0.1%, –4.0%	±200ppm
		96kHz +4.1667%, +0.1%, –0.1%, –4.0%	±200ppm
Signal Delay	Less than 3ms INPUT to OUTPUT[*1], connect with CL5 using Dante, Dante Receive Latency set to 0.25ms (one way), Fs= 48kHz		
Frequency Response	+0.5, –1.5dB 20Hz-20kHz, refer to +4dBu output @1kHz, INPUT to OUTPUT[*1], Fs= 44.1kHz, 48kHz +0.5, –1.5dB 20Hz-40kHz, refer to +4dBu output @1kHz, INPUT to OUTPUT[*1], Fs= 88.2kHz, 96kHz		
Total Harmonic Distortion[*2]	Less than 0.05% 20Hz-20kHz@+4dBu into 600Ω, Fs= 44.1kHz, 48kHz Less than 0.05% 20Hz-40kHz@+4dBu into 600Ω, Fs= 88.2kHz, 96kHz INPUT to OUTPUT[*1], Input Gain= Min.		
Hum&Noise[*3]	–128dBu typ., Equivalent Input Noise, Input Gain= Max. –88dBu Residual output noise, ST master off.		
Dynamic Range	112dB typ., DA Converter, 108dB typ., INPUT to OUTPUT[*1], Input Gain= Min.		
Crosstalk@1kHz	–100dB[*4], adjacent INPUT/OUTPUT channels, Input Gain= Min.		
Dimensions (WxHxD) and Net Weight	Ri8-D: 480mm x 44mm x 362mm, 4.5kg Ro8-D: 480mm x 44mm x 359mm, 4.4kg		
Power Requirements (wattage)	Ri8-D: 35W Ro8-D: 35W		
Power Requirements (voltage and hertz)	US/Canada: 120V 60Hz Japan: 100V 50/60Hz China: 110-240V 50/60Hz Korea: 220V 60Hz Other: 110-240V 50/60Hz		
Temperature Range	Operating temperature range: 0 - 40°C Storage temperature range: –20 - 60°C		
Included Accessories	Owner's Manual, Power Cord		

*1. INPUT to OUTPUT means Ri8-D INPUT to Ro8-D OUTPUT
*2. Total Harmonic Distortion is measured with 18dB/octave filter @80kHz
*3. Hum & Noise are measured with A-Weight filter.
*4. Crosstalk is measured with a 30dB/octave filter @22kHz

Analog Input Characteristics (Ri8-D only)

Input Terminals	GAIN	Actual Load Impedance	For Use With Nominal	Input Level		Connector
				Nominal	Max. before clip	
INPUT 1-8	+66dB	7.5kΩ	50-600Ω Mics & 600Ω Lines	–62dBu (0.616mV)	–42dBu (6.16mV)	XLR-3-31 type (Balanced)*1
	–6dB			+10dBu (2.45V)	+30dBu (24.5V)	

*1. XLR-3-31 type connectors are balanced.(1=GND, 2=HOT, 3=COLD)
* In these specifications, 0dBu = 0.775 Vrms.
* All input AD converters are 24bit linear, 128times oversampling.
* +48V DC (phantom power) is supplied to INPUT XLR type connectors via each individual software controlled switch.

Analog Output Characteristics (Ro8-D only)

Output Terminals	Actual Source Impedance	For Use With Nominal	Max.Output Level Select SW*1	Output Level		Connector
				Nominal	Max. before clip	
OUTPUT 1-8	75Ω	600Ω Lines	+24dB (default)	+4dBu (1.23 V)	+24dBu (12.3V)	XLR-3-32 type (Balanced)*2
			+18dB	–2dBu (616mV)	+18dBu (6.16V)	

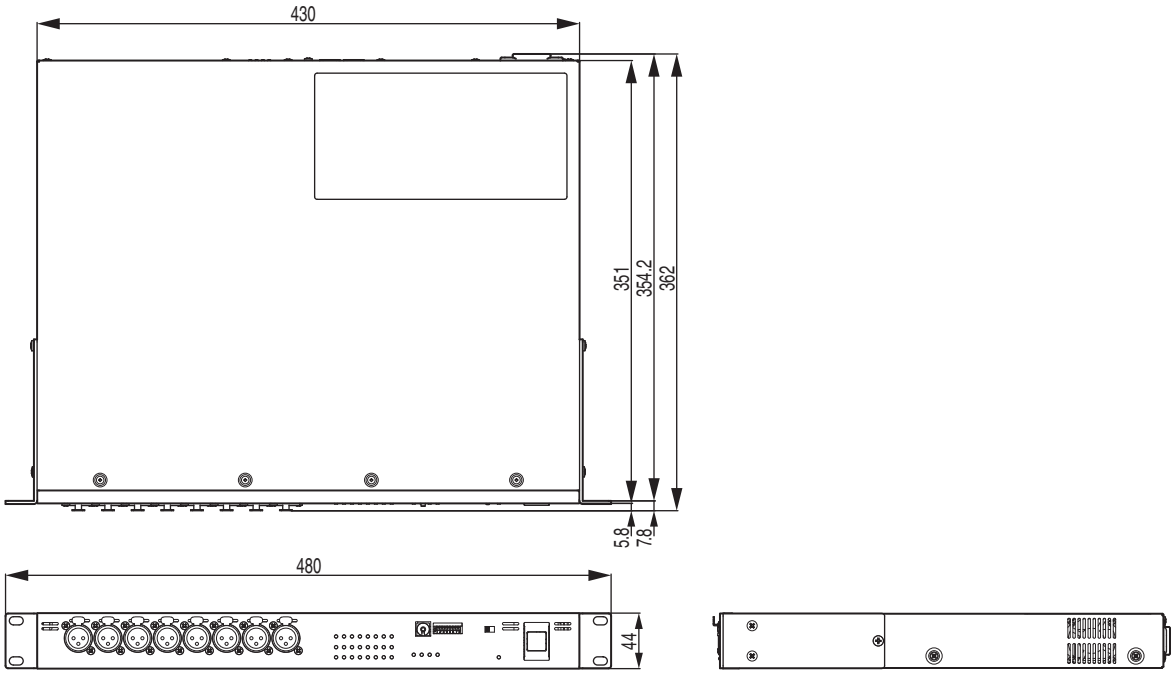
*1. There are switches inside the body to preset the maximum output level.
*2. XLR-3-32 type connectors are balanced. (1=GND, 2=HOT, 3=COLD)
* All output DA converters are 24bit, 128times oversampling.

Digital I/O Characteristics

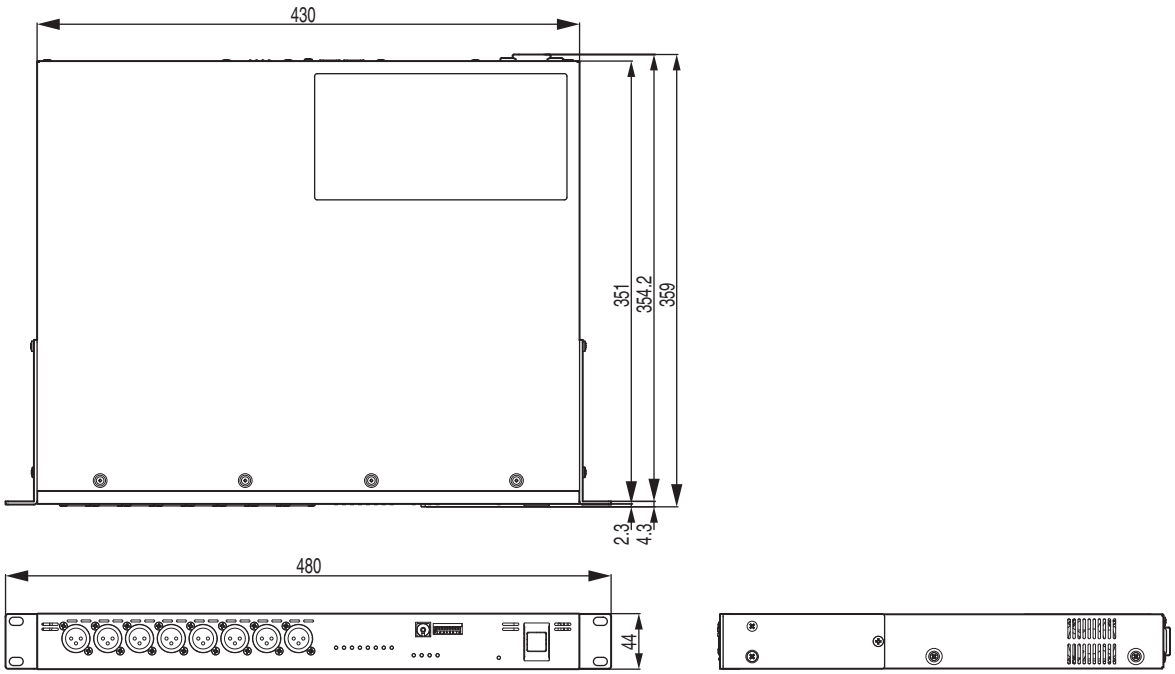
Terminals	Format	Data length	Level	Audio	Connector
Primary/Secondary	Dante	24bit or 32bit	1000Base-T	8ch (Ri8-D to other device) 8ch (Other device to Ro8-D)	RJ45

Dimensions

Ri8-D



Ro8-D



Unit: mm

Important Notice: Guarantee Information for customers in European Economic Area (EEA) and Switzerland

English

Important Notice: Guarantee Information for customers in EEA* and Switzerland
For detailed guarantee information about this Yamaha product, and Pan-EEA* and Switzerland warranty service, please either visit the website address below (Printable file is available at our website) or contact the Yamaha representative office for your country. * EEA: European Economic Area

Deutsch

Wichtiger Hinweis: Garantie-Information für Kunden in der EWR* und der Schweiz
Für nähere Garantie-Information über dieses Produkt von Yamaha, sowie über den Pan-EWR*- und Schweizer Garantieservice, besuchen Sie bitte entweder die folgend angegebene Internetadresse (eine druckfähige Version befindet sich auch auf unserer Webseite), oder wenden Sie sich an den für Ihr Land zuständigen Yamaha-Vertrieb. *EWR: Europäischer Wirtschaftsraum

Français

Remarque importante: informations de garantie pour les clients de l'EEE et la Suisse
Pour des informations plus détaillées sur la garantie de ce produit Yamaha et sur le service de garantie applicable dans l'ensemble de l'EEE ainsi qu'en Suisse, consultez notre site Web à l'adresse ci-dessous (le fichier imprimable est disponible sur notre site Web) ou contactez directement Yamaha dans votre pays de résidence. * EEE : Espace Economique Européen

Nederlands

Belangrijke mededeling: Garantie-informatie voor klanten in de EER* en Zwitserland
Voor gedetailleerde garantie-informatie over dit Yamaha-product en de garantieservice in heel de EER* en Zwitserland, gaat u naar de onderstaande website (u vind een afdrukbaar bestand op onze website) of neemt u contact op met de vertegenwoordiging van Yamaha in uw land. * EER: Europese Economische Ruimte

Español

Aviso importante: información sobre la garantía para los clientes del EEE* y Suiza
Para una información detallada sobre este producto Yamaha y sobre el soporte de garantía en la zona EEE* y Suiza, visite la dirección web que se incluye más abajo (la version del archivo para imprimir esta disponible en nuestro sitio web) o póngase en contacto con el representante de Yamaha en su país. * EEE: Espacio Económico Europeo

Italiano

Avviso importante: informazioni sulla garanzia per i clienti residenti nell'EEA* e in Svizzera
Per informazioni dettagliate sulla garanzia relativa a questo prodotto Yamaha e l'assistenza in garanzia nei paesi EEA* e in Svizzera, potete consultare il sito Web all'indirizzo riportato di seguito (è disponibile il file in formato stampabile) oppure contattare l'ufficio di rappresentanza locale della Yamaha. * EEA: Area Economica Europea

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Aviso importante: informações sobre as garantias para clientes da AEE* e da Suíça
Para obter uma informação pormenorizada sobre este produto da Yamaha e sobre o serviço de garantia na AEE* e na Suíça, visite o site a seguir (o arquivo para impressão está disponível no nosso site) ou entre em contato com o escritório de representação da Yamaha no seu país. * AEE: Área Econômica Européia

Ελληνικά

Σημαντική σημείωση: Πληροφορίες εγγύησης για τους πελάτες στον ΕΟΧ* και Ελβετία
Για λεπτομερείς πληροφορίες εγγύησης σχετικά με το παρόν προϊόν της Yamaha και την κάλυψη εγγύησης σε όλες τις χώρες του ΕΟΧ και την Ελβετία, επισκεφτείτε την παρακάτω ιστοσελίδα (Εκτυπώσιμη μορφή είναι διαθέσιμη στην ιστοσελίδα μας) ή απευθυνθείτε στην αντιπροσωπεία της Yamaha στη χώρα σας. * ΕΟΧ: Ευρωπαϊκός Οικονομικός Χώρος

Svenska

Viktigt: Garantiinformation för kunder i EES-området* och Schweiz
För detaljerad information om denna Yamahaprodukt samt garantiservice i hela EES-området* och Schweiz kan du antingen besöka nedanstående webbaddress (en utskriftsvänlig fil finns på webbplatsen) eller kontakta Yamahas officiella representant i ditt land. * EES: Europeiska Ekonomiska Samarbetsområdet

Norsk

Viktig merknad: Garantiinformasjon for kunder i EØS* og Sveits
Detaljert garantiinformasjon om dette Yamaha-produktet og garantiservice for hele EØS-området* og Sveits kan fås enten ved å besøke nettadressen nedenfor (utskriftsversjon finnes på våre nettsider) eller kontakte kontakte Yamaha-kontoret i landet der du bor. *EØS: Det europeiske økonomiske samarbeidsområdet

Dansk

Vigtig oplysning: Garantioplysninger til kunder i EØO* og Schweiz
De kan finde detaljerede garantioplysninger om dette Yamaha-produkt og den fælles garantiserviceordning for EØO* (og Schweiz) ved at besøge det websted, der er angivet nedenfor (der findes en fil, som kan udskrives, på vores websted), eller ved at kontakte Yamahas nationale repræsentationskontor i det land, hvor De bor. * EØO: Det Europæiske Økonomiske Område

Suomi

Tärkeä ilmoitus: Takuutiedot Euroopan talousalueen (ETA)* ja Sveitsin asiakkaille
Tämän Yamaha-tuotteen sekä ETA-alueen ja Sveitsin takuuta koskevat yksityiskohtaiset tiedot saatte alla olevasta nettiosoitteesta. (Tulostettava tiedosto saatavissa sivustollamme.) Voitte myös ottaa yhteyttä paikalliseen Yamaha-edustajaan. *ETA: Euroopan talousalue

Polski

Ważne: Warunki gwarancyjne obowiązujące w EOG* i Szwajcarii
Aby dowiedzieć się więcej na temat warunków gwarancyjnych tego produktu firmy Yamaha i serwisu gwarancyjnego w całym EOG* i Szwajcarii, należy odwiedzić wskazaną poniżej stronę internetową (Plik gotowy do wydruku znajduje się na naszej stronie internetowej) lub skontaktować się z przedstawicielstwem firmy Yamaha w swoim kraju. * EOG — Europejski Obszar Gospodarczy

Česky

Důležité oznámení: Záruční informace pro zákazníky v EHS* a ve Švýcarsku
Podrobné záruční informace o tomto produktu Yamaha a záručním servisu v celém EHS* a ve Švýcarsku naleznete na níže uvedené webové adrese (soubor k tisku je dostupný na našich webových stránkách) nebo se můžete obrátit na zastoupení firmy Yamaha ve své zemi. * EHS: Evropský hospodářský prostor

Magyar

Fontos figyelmeztetés: Garancia-információk az EGT* területén és Svájcban élő vásárlók számára
A jelen Yamaha termékre vonatkozó részletes garancia-információk, valamint az EGT*-re és Svájcra kiterjedő garanciális szolgáltatás tekintetében keresse fel webhelyünket az alábbi címen (a webhelyen nyomtatható fájlt is talál), vagy pedig lépjen kapcsolatba az országában működő Yamaha képviseleti irodával. * EGT: Európai Gazdasági Térség

Eesti keel

Oluline märkus: Garantiiteave Euroopa Majanduspiirkonna (EMP)* ja Šveitsi klientidele
Täpsema teabe saamiseks selle Yamaha toote garantii ning kogu Euroopa Majanduspiirkonna ja Šveitsi garantiiteeninduse kohta, külastage palun veebisaiti alljärgneval aadressil (meie saidil on saadaval prinditav fail) või pöörduge Teie regiooni Yamaha esinduse poole. * EMP: Euroopa Majanduspiirkond

Latviešu

Svarīgs paziņojums: garantijas informācija klientiem EEZ* un Šveicē
Lai saņemtu detalizētu garantijas informāciju par šo Yamaha produktu, kā arī garantijas apkalpošanu EEZ* un Šveicē, lūdzu, apmeklējiet zemāk norādīto tīmekļa vietnes adresi (tīmekļa vietnē ir pieejams drukājams fails) vai sazinieties ar jūsu valsti apkalpojošo Yamaha pārstāvniecību. * EEZ: Eiropas Ekonomikas zona

Lietuvių kalba

Dėmesio: informacija dėl garantijos pirkėjams EEE* ir Šveicarijoje
Jei reikia išsamios informacijos apie šį „Yamaha" produktą ir jo techninę priežiūrą visoje EEE* ir Šveicarijoje, apsilankykite mūsų svetainėje toliau nurodytu adresu (svetainėje yra spausdintinas failas) arba kreipkitės į „Yamaha" atstovybę savo šaliai. *EEE – Europos ekonominė erdvė

Slovenčina

Dôležité upozornenie: Informácie o záruke pre zákazníkov v EHP* a Švajčiarsku
Podrobné informácie o záruke týkajúce sa tohto produktu od spoločnosti Yamaha a garančnom servise v EHP* a Švajčiarsku nájdete na webovej stránke uvedenej nižšie (na našej webovej stránke je k dispozícii súbor na tlač) alebo sa obráťte na zástupcu spoločnosti Yamaha vo svojej krajine. * EHP: Európsky hospodársky priestor

Slovenščina

Pomembno obvestilo: Informacije o garanciji za kupce v EGP* in Švici
Za podrobnejše informacije o tem Yamahinem izdelku ter garancijskem servisu v celotnem EGP in Švici, obiščite spletno mesto, ki je navedeno spodaj (natisljiva datoteka je na voljo na našem spletnem mestu), ali se obrnite na Yamahinega predstavnika v svoji državi. * EGP: Evropski gospodarski prostor

Български език

Важно съобщение: Информация за гаранцията за клиенти в ЕИП* и Швейцария
За подробна информация за гаранцията за този продукт на Yamaha и гаранционното обслужване в паневропейската зона на ЕИП* и Швейцария или посетете посочения по-долу уеб сайт (на нашия уеб сайт има файл за печат), или се свържете с представителния офис на Yamaha във вашата страна. * ЕИП: Европейско икономическо пространство

Limba română

Notificare importantă: Informaţii despre garanţie pentru clienţii din SEE* şi Elveţia
Pentru informaţii detaliate privind acest produs Yamaha şi serviciul de garanţie Pan-SEE* şi Elveţia, vizitaţi site-ul la adresa de mai jos (fişierul imprimabil este disponibil pe site-ul nostru) sau contactaţi biroul reprezentanţei Yamaha din ţara dumneavoastră . * SEE: Spaţiul Economic European

http://europe.yamaha.com/warranty/

For details of products, please contact your nearest Yamaha representative or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

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